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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,105	01/29/2002	Christophe Moreaux	OORO20954388	6421

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EXAMINER

.LAIR, DONALD M

ART UNIT

PAPER NUMBER

2858

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/060,105

Applicant(s)

MOREAUX ET AL.

Examiner

Donald M. Lair

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 9 – 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim (US-6,027,029).

3. In regards to Claims 9, 16, 22, 28, and 29, Kim discloses an integrated circuit comprising at least one internal power supply line / reference voltage (Column 3, lines 55 – 58), at least one power supply pad connected to the internal power supply line (Fig. 2), and to be connected to an external device for receiving an external voltage (Column 2, lines 53 – 56), at least one input/output pad to be connected to the external device for receiving the external voltage (Fig. 2), at least one of a pull-up and pull-down device connected between the input/output pad and the internal power supply line, wherein it is inherent that pull-up/down devices are used to protect circuitry connected to inputs, and a detecting circuit for comparing voltage levels between the input/output pad and the internal power supply line for determining if a power supply connection with the external device is defective (Column 3, lines 34 – 59).

4. In regards to Claims 10, 11, 17 and 23, Kim discloses a circuit comprising all of the elements described above, wherein the detection circuit comprises a comparison circuit connected between each respective power supply pad and a corresponding input/output pad (Fig. 3; Column 4, lines 4 – 12).

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5. In regards to Claims 12, 13, 18, 19, 24, 25, 30, and 31, Kim discloses a circuit comprising all of the elements described above, wherein each comparison circuit comprises a first inverter/polyswitch having an input connected to the internal power supply line, and another input connected to the input/output pad for receiving power therefrom (Column 3, lines 46 – 51).

6. In regards to Claims 14, 20, 26, and 32, Kim discloses a circuit comprising all of the elements described above, wherein each comparison circuit comprises a second inverter series connected with the first inverter, the second inverter having an output for providing a defective connection signal based upon a difference in the compared voltage levels (Column 3, lines 55 – 63).

7. In regards to Claims 15, 21, 27, and 33, Kim discloses a circuit comprising all of the elements described above, wherein the detection circuit generates a defective connection signal for turning off at least a portion of the integrated circuit when a difference in the compared voltage levels exceeds a threshold (Column 4, lines 49 – 60).

#### ***Response to Arguments***

8. Applicant's arguments filed 08-29-03 have been fully considered but they are not persuasive.

9. On Page 5, paragraph 1, the Applicant asserts that “The function of the voltage detector 17 in Kim is not for determining if the power supply connection is defective, as in the claimed invention, but for determining if a voltage supplied from an external device needs to be adjusted because the voltage is too high.” The Examiner respectfully submits that a power supply connection may be described as defective if that power supply is delivering too much or too little power.

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10. On Page 5, paragraph 2 – Page 6, paragraph 1, the Applicant submits that “Kim thus fails to teach or suggest a pull-up or pull-down device connected between the at least one input/output pad (receiving the supply voltage  $V_{cc}$  or the program voltage  $V_{pp}$ ) and an internal power supply line (receiving the same supply voltage  $V_{cc}$  or program voltage  $V_{pp}$ ). Firstly, it is clear from the added comments in parentheses that the Applicant is depending on a more narrow interpretation of the claim language than the language would lend on its own. The Applicant appears to be suggesting the invention disclosed by Kim teaches only sending enable signals upon determination of a defective power supply is reached (Page 5, paragraph 2, lines 4 – 7).

However, Kim teaches delivering the level adjusted supply voltage and program voltage to the CPU (Column 4, line 66 – Column 5, line 2; Fig. 4, step 403). Clearly, the voltage detector (17) and voltage controller (18) meet the requirements for a pull-up or pull-down device that is connected between the at least one input/output pad and an internal power supply line.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald M. Lair whose telephone number is (703) 305-4450. The examiner can normally be reached on Monday - Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1436.



Donald M. Lair  
Patent Examiner  
Art Unit 2858  
September 30, 2003



**N. Le**  
**Supervisory Patent Examiner**  
**Technology Center 2800**